

# PATENT ABSTRACTS OF JAPAN

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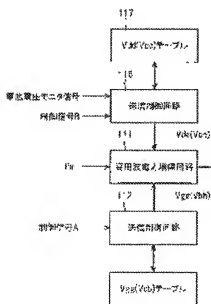
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## (54) TRANSMISSION POWER CONTROL METHOD AND TRANSMISSION POWER CONTROLLER, AND MOBILE WIRELESS STATION

### (57)Abstract:

PROBLEM TO BE SOLVED: To provide a mobile wireless station that attains an optimum power supply efficiency, even when transmission rate or the like differs or the transmission power and the battery voltage fluctuate.

SOLUTION: In the transmission power controller, where a high frequency power amplifier circuit 111 has a semiconductor amplifier element adopting a common source connection, controlling the gate voltage and/or the drain voltage of the semiconductor amplifier element linearly changes the gain of the high-frequency power amplifier circuit 111 for controlling transmission power. Preferably, a gate voltage control variable is read from a table 113, and drain voltage control variable is read from a table 117. Thus, even when the dynamic range of transmission power control is wide, the dynamic range is



ensured without increasing the circuit scale, and the power supply efficiency when the battery voltage is high; and when the output power is low, and other than maximum output power is improved, without deteriorating the modulation distortion characteristics.